Duke Energy

Analytical Laboratory

13339 Hagers Ferry Road
Huntersville, NC 28078-7929
McGuire Nuclear Complex - MG03A2
Phone: 980-875-5245   Fax: 980-875-4349

Order Summary Report

Order Number: **J11010033**

Project Name: NPDES - MONTHLY

Customer Name(s):   Sue Wallace, Matthew Dorn, Mark Harper, Todd Spade, Tara Thomas

Customer Address: 11021 BROWER RD.

                       NORTH BEND, OH 45052

Lab Contact: Therona T James   Phone: 980-875-4795

Report Authorized By: **Date:**   1/18/2011
(Signature)

Program Comments:

Miami Fort NPDES - Monthly (Week 1)

Data Flags & Calculations:

Any analytical tests or individual analytes within a test flagged with an "X" or "1" indicate a deviation from the method quality system or quality control requirement. All results are reported on a dry weight basis unless otherwise noted.

Data Package:

This data package includes analytical results that are applicable only to the samples described in this narrative. An estimation of the uncertainty of measurement for the results in the report is available upon request. This report shall not be reproduced, except in full, without the written consent of the Analytical Laboratory. Please contact the Analytical laboratory with any questions. The order of individual sections within this report is as follows:

Job Summary Report, Sample Identification, Technical Validation of Data Package, Analytical Laboratory Certificate of Analysis, Analytical Laboratory QC Reports, Sub-contracted Laboratory Results, Customer Specific Data Sheets, Reports & Documentation, Customer Database Entries, Test Case Narratives, Chain of Custody (COC)

Certification:

The Analytical Laboratory holds the following State Certifications : North Carolina (DENR) Certificate #248, South Carolina (DHEC) Laboratory ID # 99005.   Contact the Analytical Laboratory for definitive information about the certification status of specific methods.

The results in this report meet NELAP requirements through New York State Department of Health Certification # 11717.. Certified parameters are designated with an "N" in the analytical report.

Sample ID's & Descriptions:

Sample ID	Plant/Station	Collection Date and Time	Collected By	Sample Description
2011000122	MIAMI-FORT	04-Jan-11 9:30 AM	Mark Harper	OUTFALL 002
2011000123	MIAMI-FORT	04-Jan-11 9:00 AM	Mark Harper	OUTFALL 608

2 Total Samples

Technical Validation Review

Checklist:

COC and .pdf report are in agreement with sample totals
and analyses (compliance programs and procedures).   ☑ Yes   ☐ No

All Results are less than the laboratory reporting limits.   ☐ Yes   ☑ No

All laboratory QA/QC requirements are acceptable.   ☑ Yes   ☐ No

The Vendor Laboratories have been qualified by the
Analytical Laboratory   N/A

Report Sections Included:

☑ Job Summary Report   ☐ Sub-contracted Laboratory Results

☑ Sample Identification   ☐ Customer Specific Data Sheets, Reports, & Documentation

☑ Technical Validation of Data Package   ☐ Customer Database Entries

☑ Analytical Laboratory Certificate of Analysis   ☐ Test Case Narratives

☐ Analytical Laboratory QC Report   ☑ Chain of Custody

                                             ☐ Electronic Data Deliverable (EDD) Sent Separately

Reviewed By: Jenny A Herman   Date: 1/18/2011

Certificate of Laboratory Analysis

This report shall not be reproduced, except in full.

Order # J11010033

Site: OUTFALL 002   **Sample #:   2011000122**

Collection Date: 04-Jan-11 9:30 AM   Matrix: NPDES

Analyte	Result	Units	Qualifiers	RDL	Method	Analysis Date/Time	Analyst
TOTAL DISSOLVED SOLIDS							
TDS	**880**	mg/L	N	20	SM2540C	10-Jan-11 10:20	TJA7067

Site: OUTFALL 608   **Sample #:   2011000123**

Collection Date: 04-Jan-11 9:00 AM   Matrix: NPDES

Analyte	Result	Units	Qualifiers	RDL	Method	Analysis Date/Time	Analyst
ALKALINITY (FIXED END POINT 4.5)							
Alkalinity (mg/L CaCO3)	**2000**	mg/L (CaCO3)	N	0.1	SM2320B	10-Jan-11 11:22	TJA7067
INORGANIC IONS BY IC							
Chloride	**8100**	mg/L	N	100	EPA 300.0	07-Jan-11 20:19	CLEEMAN
Fluoride	**25**	mg/L	N	10	EPA 300.0	07-Jan-11 20:19	CLEEMAN
Sulfate	**11000**	mg/L	N	200	EPA 300.0	07-Jan-11 20:19	CLEEMAN
TOTAL METALS BY ICP							
Boron (B)	**547**	mg/L	N	2.5	EPA 200.7	12-Jan-11 10:55	DJSULL1
Iron (Fe)	**0.038**	mg/L	N	0.01	EPA 200.7	12-Jan-11 10:55	DJSULL1
Manganese (Mn)	**11.7**	mg/L	N	0.005	EPA 200.7	12-Jan-11 10:55	DJSULL1
TOTAL RECOVERABLE METALS BY ICP-MS							
Arsenic (As)	**< 20**	ug/L	N	20	EPA 200.8	12-Jan-11 13:42	KRICHAR
Barium (Ba)	**82.9**	ug/L	N	20	EPA 200.8	12-Jan-11 13:42	KRICHAR
Cadmium (Cd)	**< 20**	ug/L	N	20	EPA 200.8	12-Jan-11 13:42	KRICHAR
Chromium (Cr)	**< 20**	ug/L	N	20	EPA 200.8	12-Jan-11 13:42	KRICHAR
Copper (Cu)	**< 20**	ug/L	N	20	EPA 200.8	12-Jan-11 13:42	KRICHAR
Lead (Pb)	**< 20**	ug/L	N	20	EPA 200.8	12-Jan-11 13:42	KRICHAR
Zinc (Zn)	**< 40**	ug/L	N	40	EPA 200.8	12-Jan-11 13:42	KRICHAR
TOTAL DISSOLVED SOLIDS							
TDS	**31000**	mg/L	N	200	SM2540C	10-Jan-11 10:20	TJA7067
TOTAL SUSPENDED SOLIDS							
TSS	**10**	mg/L	N	5	SM2540D	07-Jan-11 15:47	CLEEMAN

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST FORM

Duke Energysm

Duke Energy Analytical Laboratory

Mail Code MGO3A2 (Building 7405)
13339 Hagers Ferry Rd
Huntersville, N. C. 28078
(704) 875-5245
Fax: (704) 875-4349

Analytical Laboratory Use Only

LIMS #: J11010033
Logged By: JH   Date & Time: 1/7/11 10:32
Sample Class NPDES
Vendor:
Cooler Temp (C): 2.1
PO #:
MR #:
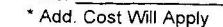
19 Page 1 of 1
DISTRIBUTION
ORIGINAL to LAB,
COPY to CLIENT

SAMPLE PROGRAM
Ground Water ____
NPDES X
Drinking Water ____
UST ____
RCRA Waste ____

1) Project Name		2) Phone No:
MIAMI-FORT NPDES Monthly **(Monthly Sampling - January 4)**		
3) Client		4) Fax No:
Miami-Fort - Sue Wallace , Tara Thomas		
5) Business Unit:	6) Process:	7) Resp. Center To:
8) Project ID:	9) Activity ID:	10) Mail Code:

Customer must Complete

Customer to complete appropriate columns to right

15 Preserv.:1=HCL
2==H₂SO₄ 3=HNO₃
4=Ice   5=None

Customer to complete all appropriate non-shaded areas.

LAB USE ONLY	12 Chem Desktop No.	13 Sample Description or ID	14 Collection Information			16 Analyses Required						
11 Lab ID			Date	Time	Signature	17 Comp.	18 Grab	TDS	Cl, F, SO4	As,Fe, Ba, B, Mn Zn, Cd, Pb, Cr, Cu	TSS, Alkalinity	
								4	4	3	4	
J011000122		Outfall 002	1-4-10	0930	*[signature]*		X	1				
J011000123		Outfall 608	1-4-11	0900	Mark Hay		X	1	1	1	2	

Customer to sign & date below - fill out from left to right.

1) Relinquished By *[signature]*	Date/Time 1-6-11 0725HRS 1-4-11 1000 MSH	2) Accepted By WPS	Date/Time 1/6/11
3) Relinquished By WPS	Date/Time 1/7/11 10:25 1-6-11	4) Accepted By	Date/Time 1/7/11 :25
5) Relinquished By	Date/Time	6) Accepted By:	Date/Time
7) Relinquished By	Date/Time	8) Accepted By:	Date/Time
9) Seal/Locked By *[signature]*	Date/Time 1-6-11 0725HRS 1-4-11 1000 MSH 1-6-11	10) Seal/Lock Opened By	Date/Time
11) Seal/Locked By Mark Hay	Date/Time	12) Seal/Lock Opened By	Date/Time 1/3/11 10:30

22 Requested Turnaround

14 Days ____
*7 Days ____
*48 Hr ____
*Other ____
* Add. Cost Will Apply

Customer, IMPORTANT! Please indicate desired turnaround.

Comments
REPACKED cooler & RESHIPPED 1-6-11   MSH

1 mL 1.1 HNO₃ added @ 10:35
to bring the pH to 2 for metals JH 1/7/11